

Sub D2
By
Conced

two sources, said display device further comprising:

an input source switch providing an automatic switching of said source to each of said first display and said second display based on detecting a position of said second panel relative to said first panel.

REMARKS

Attached hereto is an Excess Claims Letter and fee.

Also attached hereto is a marked up version of the changes made in the specification and claims by the current Amendment. The attached page is captioned "Version with markings to show changes made."

It is noted that the claim amendments herein are intended solely to more particularly point out the present invention for the Examiner, and not for distinguishing over the prior art or the statutory requirements directed to patentability. It is further noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 1-30 are all of the claims pending in the present Application. New claims 23-30 have been added. Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Harada, et al. (U.S. Patent No. 6,072,476). Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Harada, et al., as aforementioned in claim 1 in view of Jin (U.S. Patent No. 5,659,361). Claims 3, 8, and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harada, et al., and Jin as aforementioned in claims 1 and 2 in view of Pabon, et al. (U.S. Patent No. 6,256,020). Claims 4, 5, and 12-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harada, et al., Jin, and Pabon, et al., as

aforementioned in claims 2 and 3 in view of Nakadozono (U.S. Patent No. 5,121,112). Claims 6, 9, and 15-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harada, et al., Jin, Pabon, et al., and Nakadozono as aforementioned in claims 1-6 in view of Ishii, et al. (U.S. Patent No. 5,710,600). Claims 7, 10, and 19-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Harada, et al., Jin, and Pabon, et al., as aforementioned in claims 2 and 3 in view of Kamamoto, et al. (U.S. Patent No. 5,982,429).

These rejections are respectfully traversed in view of the following discussion.

I. THE CLAIMED INVENTION

Applicants' invention, as disclosed and claimed, is directed to a display/control apparatus that can be mounted in a vehicle and that includes a main display D1 and a sub display. By opening and closing the sub display with respect to the main display via a hinge mounted on the side portion, a variety of uses, such as displaying different information on the two different displays, are easily realized. The sub display can be rotated upside down in addition to the horizontal open/close movement with respect to the main display D1, thereby increasing the possible states of use. When the sub display is rotated upside down by 180°, each button B and the markings marked thereon rotates and inverts as well, thereby facilitating identification and operation of each button. The state of currently-selected/connected source is displayed on one of the main display D1 and the sub display.

The display/control apparatus of the present invention provides an integrated display and control for multiple vehicle systems, exemplarily demonstrated using audio visual systems in combination with an automotive navigation system. By automatically selecting the source based on the detected relative position of the main display D1 and sub display and modifying

the display and functions of the buttons for system control, a simplified control mechanism for multiple systems is achieved in a compact and flexible apparatus.

II. THE PRIOR ART REJECTIONS

In summary, Applicants respectfully assert that the rejections on record fail as a *prima facie* rejection under 35 USC §103(a) and that the Examiner fails to follow the guidance in MPEP § 2143. In general, the Examiner concedes that an element is missing, locates an example of the missing element in another type of display, and attempts to justify incorporation of the missing element by stating a possible result as if the missing element had been incorporated. This process is clearly hindsight if neither the primary reference nor the secondary reference provide some suggestion for the modification/incorporation or make some suggestion of the result that the Examiner asserts as being desirable.

That is, as stated in MPEP § 2143.01: "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination" (emphasis in MPEP).

Regarding the rejection for claim 1, the Examiner alleges that US Patent 6,072,476 to Harada et al. teaches all limitations of the claim but concedes that this reference does not teach use of the apparatus in a vehicle. Applicants respectfully submit that the Examiner's conclusion that it would be obvious to use the Harada system as two displays in a vehicle to "improve operability of the vehicle-mounted apparatus" is merely a conclusory statement.

That is, Applicants respectfully submit that there are at least three basic reasoning flaws in the Examiner's statement. First, the baseline established in the Harada reference provides no indication of using that apparatus as even mounted on any surface, let alone

incorporated as a display in a vehicle. Therefore, there is nothing to "improve upon".

Second, Harada explicitly teaches away from using the portable image device as being mounted on a surface (see, e.g., column 1 lines 4-8 and line 59). Even more significant, there would be no reason for mounting an "electronic book" into a vehicle, since a driver would typically not be expected to be reading while operating a vehicle. The Examiner cannot summarily dismiss the teaching of the primary reference.

Third, the Examiner has cited three references (US Patent 5,121,112 to Nakadozono, US Patent 6,067,078 to Hartman, and US Patent 6,224,222 to Inoguchi et al) that demonstrate the prior art for vehicle-mounted devices. None of these three prior art examples even remotely resemble the present invention. Nor do they even contain a suggestion that a folding laptop computer exemplified by the Harada reference be modified to mount in a vehicle. These references, therefore, clearly demonstrate that it was not at all obvious to one of ordinary skill in the art to mount a device such as described in Harada in a vehicle.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of " ... a first panel including a first display, said first panel adapted to be mounted onto a surface in said vehicle; and a second panel including a second display, wherein said second panel is adapted to be opened and closed with respect to said first display about a side thereof as an axis."

Relative to claim 2, the Examiner concedes that Harada fails to teach that the second panel can be turned upside down. To overcome this deficiency, the Examiner relies on US Patent 5,659,361 to Jin. The Examiner is understood as stating that it would have been obvious to modify Harada to incorporate the feature of being able to turn the second display upside down because such change would "improve operability" of Harada.

Applicants respectfully submit that there are at least two basic reasoning flaws with this reasoning. First, Harada is clearly intended to be a portable image display device for printed materials such as books (column 1 at lines 4-5). If the Harada device were modified as suggested by the Examiner (i.e., to place it in a vehicle), the purpose of the Harada display device no longer serves the purpose for which it was intended. Such modification is not permitted under MPEP § 2143.01 "THE PROPOSED MODIFICATION CANNOT RENDER THE PRIOR ART UNSATISFACTORY FOR ITS INTENDED PURPOSE". Therefore, Harada actually teaches against the modification urged by the Examiner.

Second, the Examiner points to Figure 3A, items 1 and 2, and column 3 at lines 49-55 and column 4 at lines 21-25 in Jin. However, these lines merely describe features of the Jin device that describe the missing element of claim 2. There is no suggestion to modify a device such as described in Harada. That is, the "tiltable, rotatable and detachable LCD view finder" in Jin is a modification incorporated into a camcorder so that the user can "easily take pictures while viewing the LCD viewfinder".

In contrast, using Harada as the primary reference, the user has no reason to "take pictures while viewing" a tiltable, rotatable and detachable LCD view finder. Therefore, the Jin reference contains no suggestion that one of ordinary skill in the art would consider as a reasonable motivation to incorporate the tiltable, rotatable and detachable LCD view finder into the Harada "electronic book".

Hence, turning to the clear language of the claims, there is no teaching or suggestion of " ... wherein said second panel is turned upside down", as required by claim 2.

Relative to the rejection for claims 3, 8, and 11, the Examiner concedes that Harada in combination with Jin fails to teach changing function indication on an operating switch in

accordance with predetermined conditions. To overcome this deficiency, the Examiner relies on US Patent 6,256,020 to Pabon et al. The Examiner is understood as meaning that it would have been obvious to modify Harada/Jin to incorporate the feature to change function indication, as taught by Pabon because such modification would "... achieve more flexibility and reduce cost by using the computer resources".

Applicants respectfully submit that, again, this rationale is merely a conclusory statement and is totally inapplicable. In order to incorporate the changing function indication as a feature into the combination of Harada/Jin, there must be conditions that change. Neither Harada nor Jin exists in a changing environment such as that of the telephone exchange described in Pabon. Therefore, there is no reason to provide the changing function indication in either prior art reference.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of " ... means to change the function indication on said operating switch according to the predetermined conditions", as required by claims 3 and 11.

Relative to the rejection for claims 4 and 12, the Examiner is understood as conceding that a combination of Harada, Jin, and Pabon fails to teach the feature of rotating an operating switch when the second panel is rotated upside down. The Examiner relies on US Patent 5,121,112 to Nakadozono to overcome this deficiency. Applicants respectfully submit that nowhere in the Nakadozono reference is there a suggestion of this feature.

Moreover, the Examiner's combination of no fewer than four (4) references to produce the claimed invention inherently points to the Examiner's impermissible hindsight reconstruction of the invention.

Hence, turning to the clear language of the claims, there is no teaching or suggestion

of “ ... means for rotating at least one of said operating switch and said function indication on said operating switch upside down when said second panel is rotated upside down”, as required by claims 4 and 12.

Relative to the rejection for claims 5, 13, and 14, the Examiner is understood as conceding that a combination of Harada, Jin, and Pabon fails to teach the feature of gears and a slide. The Examiner relies on US Patent 5,121,112 to Nakadozono to overcome this deficiency. Again, Applicants respectfully submit that nowhere in the Nakadozono reference is there a suggestion of this feature.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of “ ... a first gear ... a second gear ... and a slide plate ...”, as required by claims 5, 13, and 14.

Relative to the rejection for claims 6, 9, and 15-18, the Examiner concedes that the Harada device fails to display a current audio source on at least one of the displays. The Examiner relies on US Patent 5,710,600 to Ishii et al to overcome this deficiency.

Applicants respectfully submit that, as an apparatus for use in a vehicle the exemplary embodiment has a first function the display of a current audio source. In contrast, the Harada device is not used for audio and has no reason to display a current audio sources. Therefore, there is no reason to modify the Harada device to incorporate the feature described in Ishii to display audio source.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of “ ... means for displaying the current audio source on at least one of said first and second displays”, as required by claims 6, 9, and 15-18.

Relative to the rejection for claims 7, 10, and 19-22, the Examiner concedes that the combination of Harada, Jin, and Pabon fails to teach a switching of the source upon detecting

an angle of the two display panels. The Examiner relies on US Patent 5,982,429 to Kamamoto et al to overcome this deficiency by pointing the feature that the speaker in a video camera is rendered operative only when the liquid crystal display is open and in use (column 2 at lines 38-40). The Examiner further states that one of skill in the art would have been motivated to modify a combination of Harada/Jin/Pabon "for the user convenience".

Applicants respectfully submit that a key feature of the present invention is that it is used in a vehicle and, in the exemplary embodiment, receives inputs from at least two sources, an audio video source and a navigation source. In contrast, none of the Harada/Jin/Pabon devices receive inputs from multiple sources. Therefore, there is no reason to modify any of these devices to incorporate a feature to automatically switch sources.

Additionally, the speaker-enabling feature taught in Kamamoto is not a switching of sources since it merely serves to enable/disable the speaker to render it operative to output sound only when the liquid crystal display is open and in use.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of " ... means for detecting the action of said second panel by a predetermined angle in terms of at least one of the open/close actions and the rotation; and means for switching the source upon detecting", as required by claims 7, 10, and 19-22.

For the reasons stated above, the claimed invention is fully patentable over the cited references.

Further, the other prior art of record has been reviewed, but it too even in combination with the Harada, et al., Jin, Pabon, et al., Nakadozono, Ishii, et al., and Kamamoto references, fails to teach or suggest the claimed invention.

IV. FORMAL MATTERS AND CONCLUSION

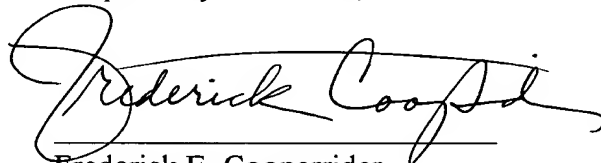
The Examiner has not acknowledged the receipt of the priority document filed on January 4, 2001, with the Application. Applicants respectfully request that the Examiner acknowledge that this priority document has been received.

In view of the foregoing, Applicant submits that claims 1-30, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph beginning at line 25 on page 3 has been revised as follows:

In the prior art, since many keys [has] have more than one function[s] allocated, it is difficult to discriminate which action is allocated to which key among a plurality of keys, and thus the operation is difficult to understand. In the prior art, since the contents shown on the display is switched depending on the function in service, it is difficult to display information from a plurality of systems clearly because the state of audio is not known while the car navigator screen or the TV screen is being displayed.

The paragraph beginning at line 12 on page 16 has been revised as follows:

In other words, since the journal for upside down rotation J formed integrally with the hinge base HB extends in the sub panel 2, when viewed from the sub panel, it is an axis of rotation that rotates with respect to the upside down rotation of the sub panel 2. The journal for the upside down rotation J is provided with a first gear JG integrally formed by resin integral molding. On the other hand[s], the base portion of each button B provided on the operating surface of the sub panel 2 is provided with a second gear BG formed by resin integral molding.

IN THE CLAIMS:

Claim 1 has been amended, as follows:

1. (Amended) A vehicle-mounted apparatus comprising:

a first panel including a first display, said first panel adapted to be mounted onto a surface in said vehicle; and

a second panel including a second display[,], wherein said second panel is adapted to be opened and closed with respect to said first display about [the] a side thereof as an axis.

The following new Claims 23-30 have been added:

23. (New) A display device, comprising:

a first panel including a first display, said first panel adapted to be mounted on a surface; and

a second panel including a second display, said second panel adapted to be opened and closed with respect to said first display about an axis located at an edge of said first display.

24. (New) The display device of claim 23, wherein a portion of said first display is visible when said second panel is in a closed position.

25. (New) The display device of claim 24, wherein said first display is adapted to provide a display on said visible portion of said first display panel when said second panel is in said closed position.

26. (New) The display device of claim 23, further comprising:

at least one control switch located on a surface of said second panel, said surface being opposite said second display.

27. (New) The display device of claim 23, further comprising:

a pivoting mechanism to allow said second panel to be turned upside down when not in said closed position.

28. (New) The display device of claim 23, further comprising:

an input from at least one source of data for display on at least one of said first display and said second display.

29. (New) The display device of claim 28, wherein said at least one source of data comprises an audio video source and a navigation source and said display device is mounted in a vehicle.

30. (New) The display device of claim 28, wherein said at least one source comprises at least two sources, said display device further comprising:

an input source switch providing an automatic switching of said source to each of said first display and said second display based on detecting a position of said second panel relative to said first panel.